

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,813	02/28/2002	Steven James Wojcik	KCX-450 (16960)	2378
Neal P Pierotti	7590 06/04/2007 Neal P. Pierotti		EXAMINER	
Dority & Manning, Attorneys at Law, P.A.			HAUGLAND, SCOTT J	
P.O. Box 1449 Greenville, SC	O. Box 1449 reenville, SC 29602 ART UNIT		ART UNIT	PAPER NUMBER
G. G			3654	
			MAIL DATE	DELIVERY MODE
			06/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	Applicant(s)	
	10/085,813 WOJCIK ET AL.			
Office Action Summary	Examiner	Art Unit		
	Scott Haugland	3654		
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet w	th the correspondence addre	ss	
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING Description of time may be available under the provisions of 37 CFR 1, after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNION 136(a). In no event, however, may a relation will apply and will expire SIX (6) MON the, cause the application to become AB	CATION. eply be timely filed THS from the mailing date of this commitandoned (35 U.S.C. § 133).		
Status	•			
1) ☐ Responsive to communication(s) filed on 12 M 2a) ☐ This action is FINAL . 2b) ☐ Thi 3) ☐ Since this application is in condition for allowed	s action is non-final.	ers, prosecution as to the mo	erits is	
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D.	. 11, 453 O.G. 213.		
Disposition of Claims				
4) Claim(s) 71-106 and 108-116 is/are pending if 4a) Of the above claim(s) is/are withdra 5) Claim(s) is/are allowed. 6) Claim(s) 71-106 and 108-116 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/	awn from consideration.			
Application Papers				
9) The specification is objected to by the Examin 10) The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct and the sheet of the she	cepted or b) objected to e drawing(s) be held in abeyar ction is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR		
Priority under 35 U.S.C. § 119				
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat * See the attached detailed Office action for a list	nts have been received. Its have been received in Apprity documents have been au (PCT Rule 17.2(a)).	pplication No received in this National Sta	age	
Attach we ant/a)				
Attachment(s) 1) Notice of References Cited (PTO-892)	4) Interview	Summary (PTO-413)		
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Date nformal Patent Application		

Art Unit: 3654

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/12/07 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 71-106 and 108-116 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clearly set forth that the winding modules in claim 87 include those of parent claim 71.

It is not clearly set forth that the winding modules in claim 104 include those of parent claim 91.

Art Unit: 3654

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 71-74, 77, 83, 88, 90, 115, and 116 are rejected under 35 U.S.C. 103(a) as being unpatentable over Little (U.S. Pat. No. 1,648,990) in view of Kammann (U.S. Pat. No. 5,437,417).

Little discloses a winder for web comprising a web transport apparatus including a conveyor belt 12 and a plurality of winding modules (13, etc.) positioned along the web transport apparatus. Each winding module comprises a mandrel 19 and a positioning apparatus (18, 21, etc.) in operative association with the mandrel configured to move the mandrel into and out of engagement with the conveyor belt.

Little does not disclose that the mandrel is in operative association with a driving device for center driving the mandrel or that each mandrel extends across the web transport apparatus from a first side to a second side.

Kammann teaches providing a web winder with a driving device in operative association with a mandrel of a winding module for center driving and rotating the mandrel.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Little with a driving device for center driving the mandrel

Art Unit: 3654

as taught by Kammann to provide greater control over the winding process to permit improved winding of different webs. It would have been obvious to provide Little with only two modules (one set) and reduce the width of the web transport apparatus so that the mandrels extend across the web transport apparatus from a first side to a second side to reduce the cost of the apparatus for uses in which it is not required to wind two webs simultaneously.

With regard to claim 73, the drive taught by Kammann would inherently brake the belt and mandrels at times during operation.

Claims 75, 84, 91, 92, 94-99, 101, 103, 105, 106, and 109-114 are rejected under 35 U.S.C. 103(a) as being unpatentable over Little in view of Kammann as applied to claim 71 above, and further in view of Nistri et al (U.S. Pat. No. 4,583,698).

Little does not disclose a vacuum conveyor as recited in claim 75. Little does not disclose that the winding modules are positioned at the end of a tissue machine (claim 84). Little does not disclose unwinding web from a parent roll of tissue (claim 91) or placing a core on the mandrel (claim 92).

Nistri et al teaches using a vacuum conveyor 9 and vacuum roll 8 to feed and facilitate threading of a web in a winder (claim 75). Nistri et al teaches winding tissue web unwound from a parent roll (claim 91) and placing a core on a winding mandrel (claim 92).

With regard to claim 75, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Little with a vacuum conveyor

Art Unit: 3654

for feeding the web to the winding modules as taught by Nistri et al to maintain feeding engagement with the web and to facilitate threading through the winding apparatus.

With regard to claim 84, it would have been obvious to position the winding modules at the end of a tissue machine to for tissue rolls.

With regard to claim 91, it would have been obvious to supply tissue from a parent roll to the winding mandrels as taught by Nistri to form smaller tissue rolls.

With regard to claim 92, it would have been obvious to provide a core on the mandrels as taught by Nistri et al to facilitate attachment of web and removal of the wound product.

With regard to claim 109, it would have been obvious to accelerate the mandrel prior to forming the nip to prevent damage to the web and belt.

Claim 76 is rejected under 35 U.S.C. 103(a) as being unpatentable over Little in view of Kammann as applied to claim 71 above, and further in view of Menz et al (doc. no. WO 98/52857).

Little does not disclose a web transport apparatus that is an electrostatic belt.

Menz et al teaches using an electrostatic belt (in lieu of rollers 3, 4) to feed web material (page 6, third full paragraph; col. 3, lines 24-29 of corresponding US Pat. No. 6,264,132).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Little with a web transport apparatus in the form of an

Art Unit: 3654

electrostatic belt as taught by Menz et al to provide more positive gripping and feeding of the web.

Claim 78 is rejected under 35 U.S.C. 103(a) as being unpatentable over Little in view of Kammann as applied to claim 71 above, and further in view of Diltz (U.S. Patent No. 3,869,095).

Little does not disclose a vacuum supplied mandrel.

Diltz teaches providing a winding apparatus with vacuum supplied mandrels 40, 41 for attaching a leading end of web to be wound to the cores.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Little with vacuum supplied mandrels as taught by Diltz to attach web to the cores without the need for adhesive.

Claim 79 is rejected under 35 U.S.C. 103(a) as being unpatentable over Little in view of Kammann as applied to claim 71 above, and further in view of Pretto et al (U.S. Patent No. 5,379,964).

Little does not disclose that the mandrels are made of a carbon fiber composite.

Pretto et al teaches forming a web winding mandrel of a carbon fiber composite to provide a lightweight mandrel having high strength and stiffness.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the mandrels of Little of a carbon fiber composite as taught by Pretto et al to make them light weight with high strength and stiffness.

Art Unit: 3654

Claim 80 is rejected under 35 U.S.C. 103(a) as being unpatentable over Little in view of Kammann as applied to claim 71 above, and further in view of Dowd (U.S. Patent No. 4,133,495).

Little does not disclose a tail sealing apparatus.

Dowd teaches providing a web winding apparatus with a tail sealing apparatus to prevent unwinding of an outer end of a web from a finished roll.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Little with a tail sealing apparatus as taught by Dowd to prevent unwinding of an outer end of the web from a completed product roll.

Claim 81 is rejected under 35 U.S.C. 103(a) as being unpatentable over Little in view of Kammann as applied to claim 71 above, and further in view of Urban (U.S. Patent No. 4,988,052).

Little does not disclose applying adhesive to the web prior to engagement with one of the winding modules.

Urban teaches applying adhesive to the leading end and trailing end of web 7 being wound before it engages winding modules 4, 5, 6.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply adhesive to the web in Little prior to engagement with one of the winding modules as taught by Urban to facilitate attachment of the web to the modules and initiation of winding.

Art Unit: 3654

Claims 82, 85, 86, 88, and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Little in view of Kammann as applied to claim 71 above, and further in view of Dusenbery (U.S. Pat. No. 4,208,019).

Little does not disclose a core loading or product stripping apparatus.

Dusenbery teaches providing a winding apparatus with a core loading and product stripping apparatus.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Little with a core loading and product stripping apparatus as taught by Dusenbery to reduce manual labor required to operate the apparatus.

With regard to claims 88 and 89, the winding modules are inherently slidable to the side opposite the loading and stripping side of the web transport apparatus by disassembly.

Claim 87 is rejected under 35 U.S.C. 103(a) as being unpatentable over Little (U.S. Pat. No. 1,648,990) in view of Kammann (U.S. Pat. No. 5,437,417) and Billingsley (U.S. Pat. No. 3,157,371).

Little is described above. Note that Little discloses three winding modules.

Little does not disclose that all of the mandrels extend from the first to the second side of the web transport apparatus.

Billingsley teaches forming mandrels 17, 18 so that they extend from a first to a second side of a web transport apparatus that supplies slit web to the mandrels.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the webs in Little by slitting and to make the mandrels in Little extend from the first to the second side of the web transport apparatus as taught by Billingsley to permit simultaneous winding of webs of various different widths.

Claims 93, 104, and 108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Little (U.S. Pat. No. 1,648,990) in view of Kammann (U.S. Pat. No. 5,437,417) and Nistri et al (U.S. Pat. No. 4,583,698) and Billingsley (U.S. Pat. No. 3,157,371).

Little is described above. Note that Little discloses three winding modules.

Little does not disclose that all of the mandrels extend from the first to the second side of the web transport apparatus.

Billingsley teaches forming mandrels 17, 18 so that they extend from a first to a second side of a web transport apparatus that supplies slit web to the mandrels.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the webs in Little by slitting and to make the mandrels in Little extend from the first to the second side of the web transport apparatus as taught by Billingsley to permit simultaneous winding of webs of various different widths.

Claim 100 is rejected under 35 U.S.C. 103(a) as being unpatentable over Little in view of Kammann and Nistri et al as applied to claim 91, and further in view of Dowd (U.S. Patent No. 4,133,495).

Little does not disclose sealing a trailing edge of the web to the rolled product.

Dowd teaches cutting web after forming a full roll and sealing a trailing end of the web to the finished roll.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to seal the trailing end of the web to the roll in Little as taught by Dowd to prevent unwinding of the roll during subsequent handling.

Claim 102 is rejected under 35 U.S.C. 103(a) as being unpatentable over Little in view of Kammann and Nistri et al as applied to claim 91 above, and further in view of Menz et al (doc. no. WO 98/52857).

Little does not disclose a web transport apparatus that is an electrostatic belt.

Menz et al teaches using an electrostatic belt (in lieu of rollers 3, 4) to feed web material (page 6, third full paragraph; col. 3, lines 24-29 of corresponding US Pat. No. 6,264,132).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Little with a web transport apparatus in the form of an electrostatic belt as taught by Menz et al to provide more positive gripping and feeding of the web.

Response to Arguments

Applicants' arguments filed 3/12/07 have been fully considered but they are not persuasive.

Art Unit: 3654

Applicants argue that Alfio does not disclose mandrels that extend from a first side of a web transport apparatus to a second side of the web transport apparatus. However, it would have been obvious to an ordinary artisan to reduce the sets of modules in Little to a single set to wind a single web and reduce the width of the web transport accordingly. It would, also, have been obvious to make the modules in Little the full width of a web transport that feeds plural webs as taught by Billingsley to allow the apparatus to handle webs of different widths and sets of webs having different width ratios.

Page 11

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Haugland whose telephone number is (571) 272-6945. The examiner can normally be reached on Mon. - Fri., 10:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/085,813 Page 12

Art Unit: 3654

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sjn 5/21/07

PATRICK MACKEY
SUPERVISORY PATENT EXAMINER
SUPERVISORY PATENTER 3600
TECHNOLOGY CENTER 3600